

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

Date of mailing (day/month/year) 24 August 2000 (24.08.00)	To: Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT Washington, D.C.20231 ETATS-UNIS D'AMERIQUE in its capacity as elected Office
International application No. PCT/US99/21900	Applicant's or agent's file reference JJD-092299(RJ)
International filing date (day/month/year) 21 September 1999 (21.09.99)	Priority date (day/month/year) 22 September 1998 (22.09.98)
Applicant DANIELS, John, J.	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:
20 April 2000 (20.04.00)

in a notice effecting later election filed with the International Bureau on:

2. The election was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Faxsimile No.: (41-22) 740.14.35

Authorized officer

Manu Berrod

Telephone No.: (41-22) 338.83.38

09/787683
JC02 Rec'd PCT/PTO 21 MAR 2001

Application of Daniels, John J.

National Stage Application of PCT Application No. PCT/US99/21900

Docket No. JJD-032201

Title: Methods and Apparatus for Multimedia Networking Systems

Enclosed:

Form PTO-1390; Form PTO/SB/01; Preliminary Amendment; and a check for \$345.

No additional fees are believed to be required; however, should it be determined that any additional fees are due, please contact the undersigned for immediate remittance of any such fees.

Mailing Certificate

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to:

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Washington, D.C. 20231

John Daniels (860)345-4734

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3/21/01
Date



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ :	A3	(11) International Publication Number:	WO 00/18054
H04N 5/76		(43) International Publication Date:	30 March 2000 (30.03.00)

(21) International Application Number: PCT/US99/21900

(22) International Filing Date: 21 September 1999 (21.09.99)

(30) Priority Data:

60/101,416	22 September 1998 (22.09.98)	US
60/107,588	9 November 1998 (09.11.98)	US
60/113,142	18 December 1998 (18.12.98)	US
60/126,226	25 March 1999 (25.03.99)	US
60/132,066	30 April 1999 (30.04.99)	US

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CT 06483 (US).(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL,
SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE),
OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML,
MR, NE, SN, TD, TG).

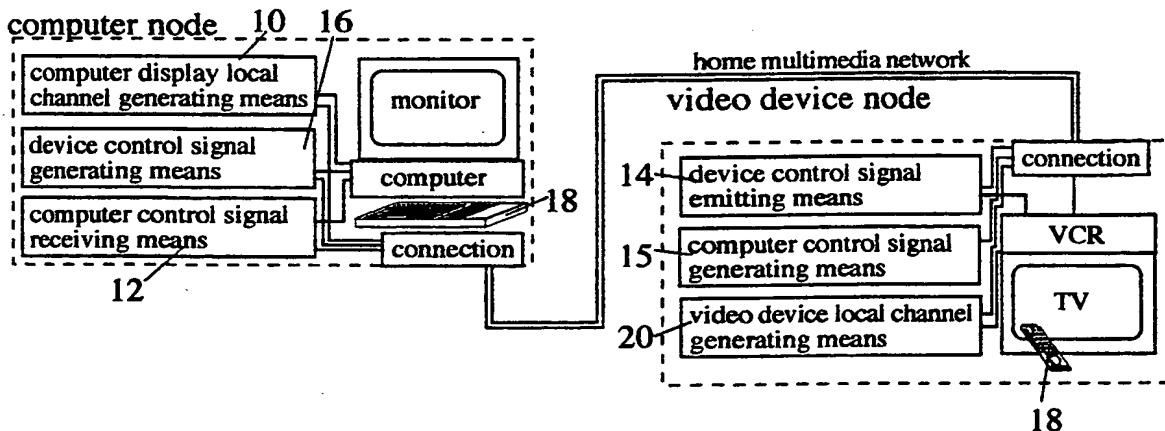
Published

With international search report.

(88) Date of publication of the international search report:

27 July 2000 (27.07.00)

(54) Title: METHODS AND APPARATUS FOR MULTIMEDIA NETWORKING SYSTEMS



(57) Abstract

A multimedia network for enabling the viewing of computer-generated data (12) on any television, video and/or audio display (TV) connected to a multimedia network, such as a hard wired coaxial television cable network. The multimedia network enables the remote control (18) of a computer via control signals carried over the multimedia network, as well as the remote control of a video device via control signals generated by a computer and carried over the multimedia network, thus enabling the viewing of computer-generated data (12) on any television, video and/or audio display connected to a multimedia network. A method for indicating the content recorded on a video recording medium. An HTML-type document is created by a computer or microprocessor and recorded on the recording medium. An inventive wireless display terminal receives a video signal originating from a computer, multimedia or other audio and/or video signal generating device and transmitted via RF signals from an antenna node.

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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/21900

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :H04N 5/76

US CL :386/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 386/46, 83, 1; 348/6,7,8, 9, 10; 379/102.01, 102.02, 102.03, 102.04, 102.05, 102.06, 102.07.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
noneElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
none

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,488,409 A (YUEN et al) 30 January 1996, Fig. 1 and columns 27-31.	1-11, 52-77
---		-----
Y	US 5,414,756 A (LEVINE) 09 May 1995, Fig. 1 and column 2.	22-46, 97-111
A	US 5,659,367 A (YUEN) 19 August 1997, Fig. 20.	1-11, 22-46, 52-77, 97-111

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"		document defining the general state of the art which is not considered to be of particular relevance
"B"	"X"	earlier document published on or after the international filing date
"L"		document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O"	"Y"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"P"	"&"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
		document member of the same patent family

Date of the actual completion of the international search

05 APRIL 2000

Date of mailing of the international search report

02 MAY 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
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Washington, D.C. 20231

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THAI TRAN

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Joni Hill

INTERNATIONAL SEARCH REPORT**International application No.
PCT/US99/21900****Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-11, 22-46, 52-77 and 97-111

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
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BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claims 1-11, 22-46, 52-77, and 97-111, drawn to recording and reproducing content information and video signal to and from a recording medium.

Group II, claims 12-21, 85-96, and 112-124, drawn to home multimedia network.

Group III, claims 47-48, drawn to an analog scrambler.

Group IV, claims 49-51 and 140-143, drawn to an antenna system.

Group V, claims 78-84, drawn to recording a television program with commercial break information.

Group VI, claims 125-139, drawn to a wireless display terminal system.

The inventions listed as Groups I, II, III, IV, V, and VI do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: each of Groups defines a distinctly different device or method, such as Group I is directed to an apparatus for recording and reproducing the content signal corresponding to the content-indicating information to or from the video tape recorder. Group II is directed to a home multimedia network having a video device node including device control signal emitting means for receiving the device control signals and for emitting video device control signals effective for controlling a video device located on the home multimedia network remotely from the computer so that the video device can be remotely controlled by the computer, the video device node further include computer control signal generating means controllable by a user input device for generating computer control signals transferable over the home multimedia network so that the computer can be remotely controlled in response to a user input. Group III is directed to an analog scrambler. Group IV is directed to an antenna system for use in wireless network. Group V is directed to a method for recording a television program with commercial break information. Group VI is directed to a wireless display terminal system.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

RECEIVED PCT

(PCT Article 36 and Rule 70)

JUN 19 2001

Technology Center 2600

Applicant's or agent's file reference JJD-092299	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/21900	International filing date (day/month/year) 21 SEPTEMBER 1999	Priority date (day/month/year) 22 SEPTEMBER 1998
International Patent Classification (IPC) or national classification and IPC IPC(7): H04N 5/76 and US Cl.: 386/46		
Applicant DANIELS, JOHN J.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

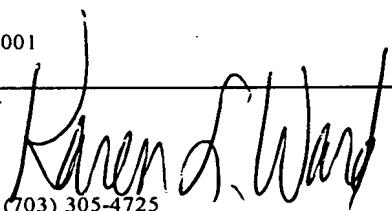
2. This REPORT consists of a total of 9 sheets.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 20 APRIL 2000	Date of completion of this report 22 MARCH 2001
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer THAI TRAN Telephone No. (703) 305-4725 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/21900

I. Basis of the report

1. With regard to the elements of the international application:*

 the international application as originally filed the description:pages 1-103, as originally filed
pages NONE
pages NONE, filed with the demand the claims:pages 104-130, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE
pages NONE, filed with the demand the drawings:pages 1-116, as originally filed
pages NONE
pages NONE, filed with the demand the sequence listing part of the description:pages NONE, as originally filed
pages NONE
pages NONE, filed with the demand

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. The amendments have resulted in the cancellation of: the description, pages NONE the claims, Nos. NONE the drawings, sheets fig. NONE5. This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

**Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

restricted the claims.
 paid additional fees.
 paid additional fees under protest.
 neither restricted nor paid additional fees.

2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

complied with.
 not complied with for the following reasons:

See Form PCT/IPEA/405

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

all parts.
 the parts relating to claims Nos. 1-11, 22-46, 52-77 and 97-111.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. statement**

Novelty (N)	Claims <u>(Please See supplemental sheet)</u>	YES
	Claims <u>(Please See supplemental sheet)</u>	NO
Inventive Step (IS)	Claims <u>(Please See supplemental sheet)</u>	YES
	Claims <u>(Please See supplemental sheet)</u>	NO
Industrial Applicability (IA)	Claims <u>(Please See supplemental sheet)</u>	YES
	Claims <u>(Please See supplemental sheet)</u>	NO

2. citations and explanations (Rule 70.7)

1. Claims 1-2, 4-5, 7-10, 52-59, 61-71 and 73-76 lack novelty under PCT Article 33(2) as being anticipated by Yuen et al ('409). Yuen et al discloses an apparatus and method for tracking the playing of VCR programs having content determining means (columns 30 and 33-35) for determining content-indicating information corresponding to the content recorded on or to be recorded on a video tape; converting means (columns 30 and 33-35) for converting the determined content-indicating information into a recordable content signal; generating means (columns 30 and 33-35) for generating a recordable information signal for recording on the video tape including the recordable content signal corresponding to the content-indicating information; transferring means (columns 30 and 33-35) for transferring the recordable information signal to a recording head of a video tape recorder; video device controlling means (columns 30 and 33-35) for controlling the video tape recorder to record the recordable information as recited in claims 1, 7, 52, 61, 70 and 73; cue determining means (column 34) for determining control cue information for use in automatically controlling a video tape recorder; means (column 34) for generating the recordable information signal including a recordable control cue signal corresponding to the control cue information; combining means (column 34) for combining the recordable content signal with the recordable cue signal to generate the recordable information signal as recited in claims 2, 8, 55, 57, 64, 66, 71 and 74; playback controlling means (columns 25-29) for controlling a video recorder to playback a recordable information signal including a recordable content signal previously recorded on a video tape; means (columns 25-29) for transferring the recordable information signal to an information signal detector means; detecting means (columns 25-29) for detecting content-indicating information from the recordable content signal so that a representation of the content of television programs recorded on the video tape can be displayed as recited in claims 4, 9 and 75; wherein the recordable information signal includes a recordable control cue signal (column 28); means (column 28) for detecting control cue information from the recordable information signal for controlling the video tape recorder; device control signal (Continued on Supplemental Sheet.)

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

V. 1. REASONED STATEMENTS:

The report as to Novelty was positive (YES) with respect to claims 3, 6, 11, 22-46, 60, 72, 77 and 97-111.

The report as to Novelty was negative (NO) with respect to claims 1-2, 4-5, 7-10, 52-59, 61-71 and 73-76.

The report as to Inventive Step was positive (YES) with respect to claims NONE.

The report as to Inventive Step was negative (NO) with respect to claims 1-11, 22-46, 52-77 and 97-111.

The report as to Industrial Applicability was positive (YES) with respect to claims 1-11, 22-46, 52-77 and 97-111.

The report as to Industrial Applicability was negative (NO) with respect to claims NONE.

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):

emitting means (column 28) for emitting device control signals for automatically controlling the video tape recorder depending on the control cue information under the control of the computer as recited in claims 5, 10 and 76; wherein the tape identification signal is recorded substantially continuously during the recording of the content signal on the video tape (columns 30 and 33-35) as recited in claims 53 and 62; wherein the tape identification signal is recorded non-continuously during the recording of the content signal on the video tape (columns 30 and 33-35) as recited in claims 54 and 63; wherein the content signal comprising a television signal containing a television program (columns 30 and 33-35) as recited in claims 56 and 65; wherein at least one of the recordable control cue signal and the tape identification signal comprises a signal recordable on the video tape that is not displayed during the normal playback of the tape (column 30) as recited in claim 58; wherein at least one of the recordable control cue signal and the tape identification signal comprises an inaudible tone signal (column 30) as recited in claim 59; wherein the generation time is determined by generating a tone signal during the recording of the video tape, the tone signal being an indication of the generation time for generating the control signal corresponding with the control cue information (column 30) as recited in claim 67; wherein the generation time is determined as a time value occurring after a detection of the tone signal during the playback of the video tape (column 30) as recited in claim 68; and wherein the time value corresponding to the generation time is stored in the tape database (column 30) as recited in claim 69.

2. Claims 3, 6, 11, 60, 72 and 77 lack an inventive step under PCT Article 33(3) as being obvious over Yuen et al ('409).

Yuen et al discloses all the features of the instant invention except for that the content-indicating information comprises HTML data. The capability of transmitting data in HTML format is well known and old in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to format the recordable information in HTML in order to increase the quality of the recordable information or merely selecting an alternative equivalent transmitting data format.

3. Claims 22-46 and 97-111 lack an inventive step under PCT Article 33(3) as being obvious over Yuen ('367) in view of Yuen et al ('409).

Yuen discloses all the features of the instant invention except for content determining means for determining content-indicating information corresponding to the content recorded on or to be recorded on a video tape; converting means for converting the determined content-indicating information into a recordable content signal; generating means for generating a recordable information signal for recording on the video tape including the recordable content signal corresponding to the content-indicating information; transferring means for transferring the recordable information signal to a recording head of a video tape recorder; video device controlling means for controlling the video tape recorder to record the recordable information as recited in claims 22 and 97.

Yuen et al teaches an apparatus and method for tracking the playing of VCR programs having content determining means (columns 30 and 33-35) for determining content-indicating information corresponding to the content recorded on or to be recorded on a video tape; converting means (columns 30 and 33-35) for converting the determined content-indicating information into a recordable content signal; generating means (columns 30 and 33-35) for generating a recordable information signal for recording on the video tape including the recordable content signal corresponding to the content-indicating information; transferring means (columns 30 and 33-35) for transferring the recordable information signal to a recording head of a video tape recorder; video device controlling means (columns 30 and 33-35) for controlling the video tape recorder to record the recordable information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Yuen's system with the capability of tracking the playing of VCR programs as taught in Yuen et al in order to facilitate and monitor the management, storage and retrieval of programs on a cassette of magnetic tape and for automatic monitor of the operation of a video cassette recorder.

4. Claims 1-11, 22-46, 52-77 and 97-111 have industrial applicability under PCT Article 33(4) because the subject matter claimed can be made or used in industry.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/21900

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 11

----- NEW CITATIONS -----

NONE